

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-7-24

Relating to Certification of New Heavy-Duty Off-Road Equipment Engines

DETROIT DIESEL CORPORATION

Pursuant to the authority vested in the Air Resources Board by Sections 43000.5, 43013 and 43018 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following Detroit Diesel Corporation 1998 model-year engine, with rated power between 175 and 750 horsepower, and exhaust emission control systems are certified as described below for use in heavy-duty off-road equipment:

Typical Equipment Usage: Pump, Compressor, and Generator Set

Fuel Type: Diesel

<u>Engine Family</u>	<u>Displacements in Liters</u>	<u>Exhaust Emission Control Systems and Special Features</u>
WDDXL12.1TFE (8V-92TA)	12.1	Turbocharger Charge Air Cooler Engine Control Module

Engine models and codes are listed on attachments. Production engines shall be in all material respects the same as those for which certification is granted.

The total hydrocarbons (THC), carbon monoxide (CO), nitrogen oxides (NOx), and particulate matters (PM) certification exhaust emission standards, in grams per brake horsepower-hour (g/bhp-hr), and the opacity of smoke emission standards, in percent (%), during acceleration (Accel), lugging (Lug), and peak (Peak) modes, for this engine family are (Title 13, California Code of Regulations, Section 2423):

<u>Exhaust Emissions (g/bhp-hr)</u>				<u>Smoke Opacity ( % )</u>		
<u>THC</u>	<u>CO</u>	<u>NOx</u>	<u>PM</u>	<u>Accel</u>	<u>Lug</u>	<u>Peak</u>
1.0	8.5	6.9	0.4	20	15	50

The THC, CO, NOx and PM exhaust emission certification values, in g/bhp-hr, and the opacity of smoke emission certification values, in percent (%), for this engine family are:

<u>Engine Family</u>	<u>Exhaust Emission (g/bhp-hr)</u>				<u>Smoke Opacity ( % )</u>		
	<u>THC</u>	<u>CO</u>	<u>NOx</u>	<u>PM</u>	<u>Accel</u>	<u>Lug</u>	<u>Peak</u>
WDDXL12.1TFE (8V-92TA)	0.4	2.4	6.6	0.2	14	4	30

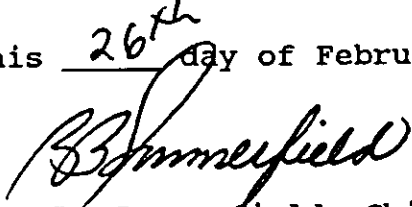
BE IT FURTHER RESOLVED: That the listed engine models comply with the "Exhaust Emission Standards and Test Procedures--Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2423) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed engine models also comply with the "Emission Control Labels--1996 and Later Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2424) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2425 et seq.).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed at El Monte, California this 26<sup>th</sup> day of February 1998.

  
R. B. Summerfield, Chief  
Mobile Source Operations Division

# LARGE ENGINE MODEL SUMMARY

Manufacturer: Detroit Diesel Corporation

Process Code: New Submission

EPA Engine Family: WDDXL12.1TFE

Manufacturer Family Name: 8V-92TA DDEC

Engine Code	Engine Model	BHP@RPM (SAE Gross)	Fuel Rate: mm/stroke @ peak HP (for diesel only)	Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	Torque @ RPM (SEA Gross)	Fuel Rate: mm/stroke@peak torque	Fuel Rate: (lbs/hr)@peak torque	Emission Control Device Per SAE J1930
1A	8V-92TA DDEC	710 @ 2300	138.9	283.3	1770 @ 1500	148.3	197.3	EC TAW
2A	8V-92TA DDEC	585 @ 2300	115.0	233.0	1594 @ 1350	123.0	151.0	EC TAW
3A	8V-92TA DDEC	540 @ 2300	105.0	213.0	1454 @ 1350	112.0	137.0	EC TAW
1B	8V-92TA DDEC	500 @ 2100	102.5	188.5	1500 @ 1300	118.7	140.0	EC TAW
1C	8V-92TA DDEC	475 @ 2100	97.3	173.4	1425 @ 1200	117.6	119.8	EC TAW
2C	8V-92TA DDEC	441 @ 1800	99.8	157.4	1425 @ 1200	113.1	118.4	EC TAW
1D	8V-92TA DDEC	400 @ 2100	83.1	154.8	1150 @ 1200	88.8	93.4	EC TAW
1E	8V-92TA DDEC	350 @ 2100	75.0	135.5	965 @ 1600	77.0	111.7	EC TAW
1F	8V-92TA DDEC	365 @ 1800	84.9	134.0	1175 @ 1350	91.2	108.6	EC TAW
1H	8V-92TA DDEC	300 @ 1800	70.9	112.5	965 @ 1350	75.5	89.8	EC TAW
1J	8V-92TA DDEC	450 @ 1950	95.2	163.8	1469 @ 1200	111.4	120.0	EC TAW
1K	8V-92TA DDEC	585 @ 2300	115.0	233.0	1725 @ 1500	139.2	185.2	EC TAW
2K	8V-92TA DDEC	540 @ 2300	105.7	215.6	1475 @ 1350	116.1	139.0	EC TAW
GS1	8V-92TA DDEC	568 @ 1800	137.8	217.9	NA	NA	NA	EC TAW
GS2	8V-92TA DDEC	515 @ 1800	120.8	189.1	NA	NA	NA	EC TAW
GS3	8V-92TA DDEC	365 @ 1800	85.7	135.5	NA	NA	NA	EC TAW

ECM, TC, CAC